

AMENDMENTS TO THE SPECIFICATION

Please delete on page 2, second full paragraph, and amend as follows:

FIG. 22 is an explanatory drawing illustrating various types of the state of various components soldered onto a print circuit board (hereinafter just a ~~board~~ board). The drawing shows the components viewed from the side of the board. In the uppermost column of the figure, a resistance element 1 favorably soldered onto a board is depicted on the left side and an element 1 with its contact lifted off on the right side. In the favorable state on the left side, the upper face of the solder 1a is recessed. In the lift-off state on the right side, the upper face of the solder 1b is projected. When the favorable state and the lift-off state are compared with each other, it is revealed that these pieces of solder are different in form at at least the ends 1c and 1d of the solder. It is required to gather data sufficient to characterize this difference in form. Further, it is required to specify a pass/fail judgment rule which characterizes this difference in form.

Please delete on page 3, second full paragraph, and amend as follows:

In the lowermost column of FIG. 22, mounted components 3 and 4

different in form are depicted as soldered onto respective boards. Again, both the components are favorably soldered. However, since the mounted components 3 and 4 are different in form, they are also different in the quantity of solder and the angle of the upper faces thereof. As mentioned above, the form or quantity of solder differs depending on whether the solder is good or bad and the form of the components. With respect to actual soldering, the form of the solder varies even with the same phenomenon, for example, the same lift-off. When a pass/fail judgment device is operated, it is required to gather data ~~sufficient~~sufficiently to characterize the differences in the form of solder. Further, it is required to clarify differences in form based on the data and specify a pass/fail judgment rule for judging pass and fail with reliability.

Please delete on page 21, second full paragraph, and amend as follows:

When a discriminant function is computed, the parameter information is appropriately selected, and further, a variable which separates pass category and fail category is computed. If discriminant functions are computed on a cause-by-cause bases, as mentioned above, an optimum discriminant function is computed for each subcategory. A case where parameter information is

desirable for separating pass category and fail category with respect to some cause but not with another cause will be taken as an example. In this case, desirable parameter information can be selected with accuracy and further a discriminant function which separates pass ~~ad~~ and fail categories with accuracy can be computed. As a result, pass/fail judgment can be accurately made with respect to all the causes of defects. Further, a probability of misjudgment can be converged into a very small value.

Please delete on page 78, second full paragraph, and amend as follows:

On the premise that the frequency distribution of each category is produced in normal distribution, in the multivariate statistics analysis, thresholds are determined by statistical parameters. Therefore, if the frequency distribution does ~~et~~ not resemble normal distribution, there is a danger that statistical parameters are not appropriately computed. Measures against this may be taken. For example, whether a frequency distribution contains skewness or peakedness as compared with normal distribution is expressed by a value relative to a value in actual frequency and normal distribution with respect to each variable. If the relative value exceeds a

predetermined value, the frequency is converted by logarithmic conversion or the like so that the value will be in the extent of a reference relative value.